

STATEMENT: TASMANIAN MINERALS MANUFACTURING and ENERGY COUNCIL

RE: L. Schneider et al. / Science of the Total Environment 656 (2019) 250–260

A study of metal contamination in south-west Tasmania was prepared by lead researcher Dr Larissa Schneider in concert with Professor Simon Haberle of the Australian National University (ANU). The initial study was released to the Science of the Total Environment website in August 2018, and, was further revised prior to it being posted to the Science of the Total Environment website on 17 November 2018. The study was more broadly released by the authors via a press release on 8 February 2019 under the heading banner *"How significant is atmospheric metal contamination from mining activity adjacent to the Tasmanian Wilderness World Heritage Area? A spatial analysis of metal concentrations using air trajectories models"*.

The key point which the authors made in their broader press release was that they had determined via their research using HYSPLIT modelling and as evidenced by the data contained in their study, is *that the lakes in the Tasmanian Wilderness World Heritage Area (TWWHA) are contaminated with dangerous metals, and at levels among the highest in the world, and the high levels of metal concentrations may be cause for health concerns*. Industry members note that in a recent interview with the ABC, Dr Larissa Schneider stated that she cognisant of the need for further study and analysis to be undertaken in order to determine what further information may need to be validated and considered prior to considering if any remediation strategies should be developed.

Industry members conducted an initial review of the study and concluded that the historical information contained in the study vis-à-vis mining on the west coast is quite limited, and some of the information was incorrect, unclear, and had not been attributed to any references. For clarity, the authors reported that mining on the west coast started as underground mining and open cut mining commenced in the 1920s, when in fact it is clearly documented that both open cut and underground mining activity was occurring in the 1880s, and continues now. Additionally, there is no evidence of review of any potential for non-mining related metal contaminants which may have come from sources such as hydro-electric schemes, agriculture, forestry, manufacturing, transport, fire management practices, tourism or natural geophysical occurrences. Inclusion of data and analysis of such sources would provide some wider context to the study. Clearly, the modelling and statistical analysis methodologies adopted by the authors of the study considers only one possible source of contamination, and have determined via their using HYSPLIT modelling that the contaminants were the result of airborne particle transportation. industry members believe that findings would be clearer and more relevant for determining conclusive base data were all of the possible sources of contamination be considered, and all of the possible forms of transfer of the contaminants be considered, as would be the case in a thorough root cause analysis.

Accordingly, industry members have commissioned a suitably qualified independent expert to conduct a review of the study and the data contained therein. Once completed and duly reviewed, industry members will determine what further study they consider should be undertaken, with a view to formulating an understanding of what they consider the next steps should be. Industry members don't consider it appropriate to speculate or proffer opinions until they have the benefit of giving consideration to empirical data.

Wayne Bould
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Tasmanian Minerals and Energy Council